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A REVIEW ARTICLE ON THE MARANA IN RASA MEDICINE PREPARATION W.S.R **LAUHA**

Dr. Manish kumar¹, Dr. Rajesh kumar dhaked²

Assistant Professor, Department of Agad Tantra, Manglayatan Ayurvedic medical college and research centre, Mathura, uttar pradesh, India.

Professor, Department of Rasashastra and Bhaishajya Kalpana, Dr. Vasant Parikh Ayurvedic Medical College, Vadnagar, Gujrat, India.

ABSTRACT: -

Marana (Burning) is a fundamental stage to be performed on substances particularly connected with Rasashastra. It is vital drug process, relevant to the first minerals/metals for their change into fine debris structure (Bhasma structure). Because of Marana, the minerals and metals are changed over in such a structure, so that, similar won't be switched back over completely to its unique structure and will be effectively retained and absorbed into body. This type of medication likewise called "Rasa" structure. The current paper gives the subtleties of various Marana medicines and their applied viewpoint with unique reference to Lauha. In the current paper an endeavor is made to audit and advance the idea of Marana with unique reference to Lauha bhasma. The data accessible in this audit could be useful to researcher, drug originators to do more Ayurvedic research towards idea of Marana. More artistic examination is required on Marana to lay out various bhasma guaranteed restorative potential.

KEYWORDS: - Marana, Bhasma, Rasa, minerals, research

INTRODUCTION: -

Rasa Shastra, a branch-off of Ayurveda famous from middle age period, for the most part manages restorative use of metals and minerals known as the Rasaushadhis (herbo-mineral-metallic mixtures). The expert medication of this antiquated science is Parada (mercury), while different medications are utilized as its subordinate. The inward organization of all metals and minerals became conceivable due to the creation of drug innovation of changing over metals and minerals into Bhasmas. Bhasmas (calx) are exceptional Rasa arrangements in which metals and minerals are handled after different Samskaras (handling) like detoxification, (Shodhana) changing over into powders (Jarana, causing rot of metals) and burning (Marana, killing metallic properties) strategies. The course of Shodhana eliminates pollutions which are probably going to achieve specific poisonous impacts. Cleansed substance, whether it is Rasa-Uparasa or Dhatu after

maceration for certain medications, when exposed to warm treatment or puta named as 'Marana'. "Marana" is gotten from the root word 'Mriya-Marne' which in a real sense implies - 'to kill'. In this manner, the cycle by which Lauha (shada Lauha all dhatus), are changed to a microfine stage for simple osmosis in the body (at cell level), with no inappropriate secondary effect is viewed as 'Marana'. Acharya Nagarjuna the preeminent researcher of Indian speculative chemistry has expounded significance of Marana. The metal after legitimate burning accomplishes the condition of rasibhavana for example colloidal state. If, managed with legitimate standards, can ease illnesses or on the other hand in the event that they are used in a normal premise, safeguards unjustifiable turning gray of hair, development of sickness and degenerative course of maturing or at the end of the day it satisfies every one of the properties of dhatus in the body. Almost comparative view is referenced in text like Rasarnava, Rasa Ratna Samuchhaya and so forth. However, the word 'Putapaka' usually utilized for 'Marana', Yet essentially and explicitly in setting of Lauha (Iron), rather a complicated technique includes Bhanupaka. Sthalipaka and Putapaka as referenced by Nagarjuna under depiction of Amritsara Lauha.

CLASSIFICATION: -

Despite the fact that there is no obvious grouping for the course of Marana, yet with the end goal of straightforwardness, it very well may be under remained as Samanya Marana (aggregate methodology for all metals) and Vishesha Marana (Individualstic approach for perticular metal). Vishesha Marana for Lauha (Iron) can additionally be partitioned into two gatherings, normal cycles of Marana for all assortments of Iron and Marana well defined for Mundadi assortments.

SAMANYA MARANA: -

1. AYASKRITI: -

The earliest reference of Marana is seen from samhita period, where metals are made into powder for inside organization through an interaction called 'Ayaskriti." Ayaskriti' in a real sense implies - 'Making of Lauha' is a cycle where crumbling of metal is finished through expansion of some natural material through extreme intensity therapy. Charak Samhita and Sushruta samhita accentuates the need to notice extraordinary watchfulness while utilizing metals, and coordinates that they ought to be decreased to miniature fine powders through the uniquely planned process 'Ayaskriti'. The cycle administered in Ayaskriti incorporates extreme warming of the metal followed by continued extinguishing into a few natural media till the metal is changed into its best structure. In Charak samhita under rasayana Chikistsa, for arrangement of Louhadi rsayana, lauha diminished into powder structure by warming and extinguishing in various fluid media likeTriphala,Gomutra, saindhav lavana, yavakshara, ingudi kshara and kinshuka kshara till it is switched over completely to anjanavat~ fine powder. Anjanavat louha patra are made into powder structure in a khalva yantra and afterward separated. This is churna type of Ayaskriti Kalpana. This separated churna is added to a few fluid media like Amalaki swaras and madhu, held under pile of Paddy for 1 Year coming about in avaleha type of Ayaskriti. In sushruta samhita under Kustha chikistsa both churna as well as leha type of Ayasktiti are referenced. Reference of Asava type of ayaskriiti is seen in Ashtanga Hridya under Premha chikitsa. Acharya Sushruta has pushed this course of change for all metals preceding their inward organization.

2. PARADA AS A BEST MARAKA DRAVYA: -

With the coming of Rasa-shastra the significance of mercury in different metallurgical cycles is all around acknowledged by all. This thus has established the underpinning of the essential rule for incineation of metals which says Marana process where rasa bhasma is utilized as a maraka drug is viewed as the best followed by marana with natural medications. This reality is additionally made validated by saying that metals leave their malevolent properties, when burned with mercury. Marana with gandhaka should be sub-par, while marana with ariloha is to top it all off. Comparable is the perspective on Siddha Laxmishavara as referenced in Rasendra Chintamani and Ayurveda Prakash. Instances of Burning of metal with their Arilauha, for example the metal having opposing properties despite the fact that exist right from the hour of Rasendramangala and was subsequently trailed by the greater part of the researchers and still, at the end of the day a few creators

are of view that Marana with Arilauha is to top it all off. The first refrain citing this reality is first and foremost seen in Rasendra Chudamani and was accepted by a portion of the researchers of later period.

3. GANDHAKA OR MAKSHIKA AS MARAKA-DRAVYA: -

Gandhaka (sulfur) and Makshika (Chalcopyrite) have been pushed as a Lauha maraka dravyas for all metals.

4. MARANA BY SURYA PUTA: -

The bhasma made by this cycle accompanies different names in various texts as Swayamagni rasa in Rasa Ratnkar; Somamrita Lauha, Suryatapi Lauha bhasma in Ayurveda Prakash and Yogaratnakar; Lauha rasayana, Swayamagni rasa and Varitara Lauha in Shraghdhar Samhita. In certain texts it should be for Lauha (Iron) just where as some others advocate this technique for all Lauha (Shad Lauha~ all metals). In this technique, kajjali is ready by blending Parada and Gandhak in proportion of 2:1. To this kajjali equivalent sum i.e 3 pieces of Lauha is added. The material is impregnated with kumari swarasa in either tapta khalva or under daylight. The material is made into bolus and wraped in leaves of eranda, kept in copper/bronze vessel under extreme sunrays for around 3-6 hours. At last, the vessel is covered under pile of paddy for 3 days.

5. OTHER METHODS FOR SAMANYA MARANA: -

- Burn Metal alongside parada and gandhak in sikata yantra for 4 yama (12 hrs). Gandhaka might be added from 1-crease to 6-overlap to additionally potentiate the adequacy.
- Metal pulverized with Manahshila and Gandhak impregnated with plastic of Ark is exposed to puta for multiple times. Rasa Tarangini encouraged to proceed with the cycle till total bhasmikarana happens.
- Equivalent piece of Gandhak, Manahshila, Hingula and Parada are impregnated with lemon juice, made into glue and spread over metal. The metal is exposed to 7 putas to get ready great quality Lauha bhasma.
- Equivalent piece of Gandhak, Tuttha are added to the Metal and impregnated with Kumari Swarasa for 1 day and exposed to gajaputa.
- Grind up metal and mrita rasa in Juice of medication of amla varga and exposed to puta warming framework for multiple times to plan great quality bhasma.
- Blend equivalent pieces of Metal, Parada, Gandhak and Tapija. Apply heat by puta framework.
- Parada Gandhak and metal are ground up appropriately and exposed to puta (Intensity) causes fast burning.
- Rasopnishat suggested home grown durgs for both shodhana as well as Marana of Lauha.

VISESHA MARANA: -

Drugs in which iron is the main fixing, are superior to other people, subsequently it is to be burned cautiously. There are various ways for burning referenced in the different texts where 'Marana' is accomplished by just impregnating the Lauha for certain reasonable media, may it be spices, minerals or creature item, trailed by heat treatment till the Lauha satisfy the standards of appropriate cremation. On going through the writing cautiously one can undoubtedly make a determination that this cycle is fairly a complicated one and includes different transitional cycles like Bhanupaka, Sthalipaka, Putana lastly Pradhana paka or a kind of Amritikarana as portrayed by Nagarjuna in setting of 'Amritsara Lauha'. Because of inaccessibility of Loha-shastra of Nagarjuna today, this interaction can be perceived by going through the message like Chakradatta Rasendra Chintamani where it has been succinctly referenced. Almost comparative idea of Marana is additionally seen in Lauha Sarvasvam while the messages of later period like Rasendra Sara Sangraha and most recent period Rasa Tarangini have additionally arranged the medications for Lauha Marana as per contribution of dosha.

MARANA: -

This is the starter strategy in Lauha Marana and can expect to be the cycle for carrying iron to a miniature fine stage. Here Iron is spread for certain medications and afterward extinguished in a fluid media, for the most part Triphala. This method is mostly referenced in the texts explicitly managing Lauha like Lauha shastra of

Nagarjuna, Lauha sarvasvam and so forth. The method involved with extinguishing is rehashed for multiple times. On the off chance that iron isn't powdered even in the wake of extinguishing into Triphala, it ought to be disposed of believing it to be material other than Lauha. Drugs which are recommended for spreading incorporates Kutharchinna, Triphala, Girikarnika, Asthi-sanhara, Karikarnika, Shatavari, Kesharaja, Shalinch shaka, Kasa, Punarnava, Bhringraja Gandirika, Mahoushadhi, Shalincha Shaka, Hastiparni, Changeri, Kutharika, Vikankata, Rakta marisha, Twacha, Manahshila, Hingula, Swarna makshika and so on.

BHANUPAKA: -

Warming iron under serious Sunrays in the wake of impregnating for certain fluid media is named as Bhanupaka. For bhanupaka Mainly Triphala is referenced. Be that as it may, at certain spots water, and kanji are likewise recommended. The interaction is either performed consistently for 3 days or rehashed for multiple times.

STHALIPAKA: -

Bubbling iron in a vessel called Sthali for certain fluid media till all the fluid gets vanished is known as Sthalipaka. Lauha Sarvasvam prescribes to keep the sthali covered under bhugarbha for the time of one year. Quantum of intensity to be given for Sthalipaka is either Kharagni or Sukhagni. Triphala (Proportion of triphala ought to be two times of Lauha) is mostly pushed for Sthalipaka. Gajakarna, Shatavari, Bhringraja, Kesharaja, Palasha are other endorsed drugs. In Rasendra Saar Samgrhaya, Rasa Tarangini and Rasa Jala Nidhi, drugs as per the dosika contribution for specific illness has additionally been determined. Rasendra Chintamani and Chakradatta prescribes to choose the medications as indicated by the infection or prakriti of the patient. Lauha Sarvasvam adviced swarna makshika and hingula for sthalipaka separated from Triphala.

PUTAPAKA: -

The proportion of choosing the level of paka is called as 'puta-paka'. Among the different intermediatory processes associated with the burning of Lauha, the 'puta' is of central significance attributable to the property of carrying Lauha to that state from where it can't be reestablished further. This interaction eliminates imperfections as well as expands the restorative capability of the Lauha. All in all, it is through burning the undesirable metallic properties of Lauha are eliminated, consequently making it reasonable for substantial absorption. The significance of putapaka can be assessed by going through the planning named 'Sudha-Sagar-Lauha' which is ready after giving 4380 putas and is restoratively supported to take following a hole of 20 years that too in a pitiful portion of 1 yava (41.6 mg).

HOW LONG PUTA IS TO BE GIVEN: -

Remedial adequacy of Lauha increments with the expansion in number of putas. Likewise for restoring sicknesses 10-100 putas while for Vajikarana 10-500 and for Rasayana 100-1000 putas are by and large supported in the event of iron. As indicated by certain creators Puta ought to be given till the bhasma becomes microfine to drift over the outer layer of water or till it gets appropriately burned or becomes niruttha. (for example, try not to hold its parental structure) As per Rasa Tarangini least 60 puta and most extreme 1000 putas are expected for burning of Lauha. Ayurvedic Model of India suggests 60 putas for burning however additionally prescribed to give 100 or 1000 puta for improved viability. Ayurveda Prakash has obviously shown Gajaputa for a wide range of Lauha bhasma.

DRUGS PRESCRIBED FOR PUTAPAKA: -

In setting of Amritsara Lauha Triphala, Bhringraja, Nagakeshar, Shatavari, Maankanda, Bhallataka, Karikarna, Punarnava is upheld separately or all in all for putapaka. These medications can be utilized by the doshika inclusion or prakriti of the patients. Under depiction of Sudha-sagara Lauha, Rasa Jala Nidhi has supported to utilize the juice of another tree or spice or grass for around 12 years for example 4380 medications are to be utilized in handling of Lauha with next to no redundancy. Rasa Tarangini incorporates Triphala, Shatamuli, Sinhika, Talmulika, Neelotpala, Hribera, Dashamula, Punarnava, Vriddadaru, Bhringaraja, Vishva, Vidanga, Karanja, Shigru, Nirgundi, Tulsi, Eranda, Hastikarnapalasha, Parpataka, Chandana and so forth as Lauhamaraka gana. Aside from the previously mentioned medicates some particular Lauha maraka bunches

are additionally named Vatahara gana, Pittahara gana, and Kaphahara gana. Further in circumstance of nonaccessibility of previously mentioned drugs, Triphala alone can be utilized for incineration.

DISCUSSION: -

On reviewing the writing, it is obvious that the inside utilization of metals goes back from millennia prior, when it was utilized as miniature fine powder got by warming and extinguishing the metal into a few fluid media, otherwise called 'Ayaskriti'. This course of 'Ayaskriti' itself gone through different phases of changes bringing about new aspects in the drug dose types of metals viz. Leha Ayaskriti and Asava Ayaskriti separated from previous churna sort of Ayaskriti. With the mind of men this inescapable persistent interaction continues to transform from the early-stage type of 'Ayaskriti' to a very much complex study of Lauha-Shastra focusing on Lauha vedha for example change of lower metals into higher ones as well as Deha vedha to make the delicate body stable in order to empower one to take a stab at common pleasure. Yet, this study of Indian speculative chemistry was exceptionally muddled and hard to see subsequently came to an edge of termination, which was subsequently restored as Amritsara Lauha of Nagarjuna as ran over in the texts of later period viz. Vangsena Samhita, Chakradatta, Rasendra Chintamani and so forth. Till date this course of drug science is changing, taking on essentials of Lauha shastra of Nagarjuna with required corrections during the time spent Shodhana, Bhanupaka, Sthalipaka, and Putana explicitly in setting of Lauha. The course of Shodhana or filtration is the starter stage in the handling of the metal. Here immaculateness doesn't imply a phase of accomplishing compound virtue without any trace of different components rather a condition of joining of different materials into the substance sanitized. The raised temperatures and the carbon shaped while warming will help in decrease of the material. Essentially, the minor components present in the endorsed fluid media as well as pH of the fluid media will all assistance in one or the other separation or end of the pollutions if present. These perceptions are upheld by the accompanying clarification given on present day messages as well. On warming a metal to an ideal level, the metal extends with modification of grain limit and grain limit energy. The gem cross section gets upset with generally hopping of the electrons from their relative shell. This, thus, makes a few openings in the gem cross section structure. On extinguishing such metal in to a fluid media promptly creates crack in the precious stone design attributable to the reality of unexpected temperature change. Further the natural material from extinguishing media then topped off the opportunities, which were made nearly warming cycle. This progressive course of warming and extinguishing hence breaks down the metal further. Taking into account natural solvents (fluid media) endorsed for this unique reason, it is clear that they either go under Kshar varga, Amla varga, Lavana varga or Vida varga for example it is possible that they are, fundamental, acidic or unbiased in nature These varga are explicitly outlined for Shodhana, Jarana, Dravana, Putana, Bhasmikarana karma which are only the ways of deceiving the metal. The metal in the setting has been exposed to the intermediatory processes like Bhanupaka and Sthalipaka earlier exposing it to the course of Marana. Here, the hidden thought in the handling of the metal by these cycles is to deliver the metal to totally decrease. In these cycles the Lauha is presented to an open environment for example outside in wet condition without exposing to warm and after use of direct intensity as in Bhanupaka and Sthalipaka separately. Slow enduring of rock in the Earth hull because of different synthetics and additionally actual changes going through in open climate may be the central thought for going through the course of Bhanupaka to deceive the metal further. In process gone through iron responds with sodden air in an open condition with some responding fluid media for delayed period changes over the iron into its oxide structure. The resultant item is then exposed to Sthalipaka to additionally hurry the interaction by exposing it to guide intensity to change over any excess Lauha into its oxide structure completely. Similarly acidic pH that contributes in the digestion of iron in the body, Triphala being acidic in nature could add to some particular response in the metal basing upon the guideline and consequently is primarily upheld for Bhanupaka as well as for practically all strategies engaged with handling of Lauha (Shada Lauha). After Sthalipaka, next comes the course of Putana where the metal is exposed to warming framework in a shut chamber without a trace of air subsequent to being treated for certain home-grown fluid media. The homegrown material present in the fluid media gets carbonized during the warming system and this carbon helps in lessening the metal appropriately. This cycle is hurried by the quantum of intensity that has been applied for. It is the Marana cycle after Sthalipaka which is given vital significance in the handling of any metal. Moreover, appropriately burned Lauha bhasma is professed to be significantly more solid than that of

jarita Rasa (Jirna Parada) Different focuses to consider in setting of Marana are the media utilized for levigation, heat treatment and strategies embraced for going through the course of Marana. Putana or the techniques for burnings is a significant perspective for assessing restorative viability of a metal and the course of Putana carries miniature fine stage to a metal consequently making it reasonable for short acting pharmacokinetics. Yet, in setting of Lauha (iron) kind of puta to be supported itself is a central issue mark. Assortments of puta going from Gajaputa, Ardha gajaputa, Hasta pramana puta, Kukkuta puta, Shodasha angula puta, Puta with seven prastha or ten prastha cow waste cakes or even Surya puta has been pushed in various texts under various strategies for burning. Every one of these Putas show a wide variety as far as their aspect, measure of the intensity provided or measure of metal to be burned. Indeed, even as far as the Puta suggested by government endorsed model viz. Gaja puta various sentiments ran over. The researchers of Rasa shastra, regarding cremation process for example Marana have suggested four essential media. The bhasma made in relationship with either Parada (mercury), Moolika (home grown drugs), Gandhaka (sulfur) and its items are acknowledged certain as remedial specialists though cremation with Arilohas (hostile metal) should be most exceedingly terrible of all as such bhasmas may create bothersome outcomes in the body. This view was cited in Rasendra Chudamani, which, first and foremost, was subsequently continued in Rasa Ratna Samucchaya, Rasa Padatti, Rasa Kamadhenuetc. A similar truth has likewise been referenced by Ayurveda Prakash, cited it to be the perspective on some other Acharyas. Prof. Kulkarni, on his editorial on Rasa Ratna Samucchaya, further explained this reality and included drugs like Haritala, Manashila Gandhaka, Srotoanjana and so on among Ari - Lauha (Ari adversary, Lauha - metal). As indicated by him albeit these materials crumble the metal undeniably more effectively however grant a portion of their hostile properties to burn metal which isn't attractive for the human body and ought not be polished. On studying the texts of still prior period viz. Rasendra Mangalam, Rudrayamala tantra, Rasadhyaya, Rasa Ratnakara and so forth a totally unique picture may reminiscent of purpose of these materials during the time spent burning of practically all metals and infact helps in accomplishing the phase of 'Nirutthaghata' I. e. transformation of metal to a phase from where it couldn't procure its parental structure a definitive point of the course of 'Marana' to accomplish the province of Rasibhavana to confer best Rasayana impact to the human body. Curiously, in opposition to their own view about Arilauha, the texts like Rasa Padatti, Rasa Ratna Samucchaya, Ayurveda Prakash, have additionally supported the utilization of Manashila for Naga, Haritala for Vanga, Hingula for Lauha and so on. There are a few other prominent messages of Rasa Shastra like Sharangadhar Samhita, Rasendra Chintamani, Yoga Ratnakara, Vaidya Chintamani where writing of Arilauha isn't contacted yet strategies for Lauha Marana utilizing these Arilauha are very much referenced Sharangadhar Samhita, Rasendra Chintamani. Phala shruti like 'maryeta putapaken niruttham bhasma jayete', vinihanti sadhya, vitashanka prayojyeta, in setting of Arilauha, legitimizes their utilization for marana. They might be named as Lauha mitra instead of Arilauha to conquer the debate, similar to the assessment of Sarlarth prakashini Sanskrit discourse on Rasa Ratna Samucchaya.

CONCLUSION: -

The present scholarly examination work was done for clearing the disarray on Marana process. The drug study of Ayurveda is an open field for research. The trividha Lauha Kalpana portrayed in Lauha shastra of Nagarjuna is a sign for the improvement of new plans of Lauha kalp from existing one's using the essential standards. as obvious in Amritsara Lauha of Nagarjuna. Thus, these comprehension on Marana might be useful as an instrument for help for the producers in creating SOP of Lauha Bhasma.

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